

What is claimed is:

1. Use of a propulsion system for a vehicle which is moved relatively quickly with a first propulsion system, which comprises a rotating, horizontally disposed cylinder (20), preferably with end plates (70), as an additional propulsion, a fluid flow (F) generated by the first propulsion system entering a channel (10) and being diverted in the channel in its direction (10") and impinging on the rotating cylinder (20), whereby the supplementary propulsion is generated on the basis of the Magnus effect in a desired direction.
2. The use of a propulsion system on the basis of the Magnus effect with a rotating, vertically disposed cylinder (20), preferably with end plates, in addition to an existing propulsion system, wherein a fluid flow (F) in a channel (10), which is diverted in its direction, impinges onto the rotating cylinder (20) and generates a supplementary propulsion in a desired direction.
3. The use according to claim 1, wherein the diversion (10") takes place upwards.
4. The use according to claim 1, wherein the diversion takes place downwards.
5. The use according to claim 2, wherein the diversion takes place laterally.
6. The use according to claim 2, wherein the diversion by 90° takes place.
7. The use according to claim 1 or 2, wherein the diversion by an angle deviating from 90° takes place.
8. The use according to claim 1 or 2, wherein the rotating cylinder is mounted in the center of the channel (10) behind the diversion point (10").
9. The use according to claim 1 or 2, wherein the rotating cylinder (20) is asymmetrically mounted in the channel, in particular closer to the side of the travel direction.

10. The use according to claim 1 or 2, wherein the channel (10) is covered by a baffle plate (80) to reduce a fluid resistance formed during the propulsion before the diversion section, in particular above and spatially above or before the bend point (10") of the channel (10, 10\*).
- 5 11. The use according to claim 1 or 2 with only a single channel (10) with a rectangular cross-section.
- 10 12. The use according to claim 1 or 2 with several channels (10\*) which have rectangular, elliptic or circular cross-sections.
13. The use according to claim 1 or 2, wherein the vehicle is a road or land vehicle, in particular a truck or an automobile.
- 15 14. The use according to claims 1, 2 or 13, wherein the relatively rapid movement is less than 150 km/h, in particular describes the speed of the vehicle above the ground.
- 20 15. The use according to claims 1, 2 or 14, wherein the relatively rapid movement is more than 10 km/h, in particular more than substantially 50 km/h, preferably in the range of between 60 km/h and 100 km/h.
- 25 16. The use according to claim 1 or 2, wherein the relatively rapid movement is a movement of more than 10 km/h, in a naval craft.
- 30 17. The use according to claim 1 or 2, wherein the vehicle is no aircraft.
18. A process according to any of claims 1 or 2, for the additional driving, in particular the driving of a vehicle, on which an additional drive system is mounted in addition to an independent main propulsion that is spaced from the additional drive.
19. The process according to claim 18, wherein a regular speed of the vehicle is between 50 km/h and 100 km/h, measured above ground.

20. The process according to claim 18, wherein the fluid flow is air and flows substantially from the front as a relative wind.
- 5 21. Additional drive system on the basis of the Magnus effect comprising a rotating, horizontally disposed cylinder (20) with end plates (17), characterized in that a fluid flow in a channel (10, 10\*), which is diverted in its direction, impinges on the rotor (20) in order to generate an additional propulsion (60) in a desired direction.
- 10 22. Additional drive system on the basis of the Magnus effect comprising a rotating, vertically disposed cylinder (20) with end plates (17), characterized in that a fluid flow in a channel, which is diverted in its direction, impinges on the rotor (20) in order to generate the propulsion (60) formed (in addition to a main propulsion) in a desired direction.